

REMARKS

The Applicant has filed the present Response in reply to the outstanding Final Official Action of July 6, 2005, and the Applicant believes the Response to be fully responsive to the Official Action for the reasons set forth below in greater detail.

At the onset, the Applicant would like to note that Claims 1-15, and 17 have been amended herewith. Specifically, the claims have been amended to recite a Code Division Multi Access (CDMA) digital reception apparatus in the preamble. Additionally, Claims 7 and 17 have been amended to clarify the time slots, i.e., the first and second time slot period for measurement.

Applicant would like to thank the Examiner for taking the time to have an Examiner's interview over the phone. During the interview, Applicant discussed the § 112 claim rejection. Applicant pointed to Figures 8A, 9A, 10A and 11 for support. Applicant submits that the claim limitation is clear. Specifically how to gradually increase and decrease the reception levels from a first and second reception antenna for measurement. The measurement is an accumulated reception signal strength.

In the outstanding Official Action, the Examiner rejected Claims 1, 2, 7-13 and 15-23 under 35 U.S.C. § 103(a) as being unpatentable over Morris et al., United States Patent No. 6,032,033 (hereinafter "Morris") and in view of Kenkel et al., United States Patent No. 6,296,565 (hereinafter "Kenkel").

Applicant submits that the instant claims are patentably distinct from the hypothetical combination of Morris and Kenkel.

Specifically, Morris is directed to a Time Division Multiple Access (TDMA) Radio System. In a TDMA system electric fields are received in signal bursts. Morris teaches that a

first RSSI measurement is made during a first predetermined time period. Then, in order to measure the second RSSI value, the receiver must switch reception from the first antenna to a second antenna. “In order to determine which antenna to use for the burst being received, during the preamble the diversity controller 110 enables with control line 254 the capture of an RSSI (received signal strength indication) for the signal received through each antenna in turn, and selects the antenna with the better measurement in conjunction with a digital quality metric produced by the timing recovery/QM accumulation block 218.” See, Col. 7, lines 11-18.

Specifically, during the first six symbol periods of the preamble, an RSSI value accumulates a quality metric for the first antenna. At the end of this time the accumulated quality metric for the first antenna is saved through line 222.

Then the receiver switches reception from the first receiver to the second receiver. Additionally, during the next six symbol periods, a digital quality metric is accumulated for the second antenna. “At the end of this period, another ADC RSSI measurement is captured by signaling the ADC 252 through line 254. The stored digital RSSI sample for the first antenna and the digital sample for the second antenna are compared digitally in the diversity controller 110. If the measurement for the first antenna is greater than that for the second antenna by a predetermined amount (to offset for improved timing recovery in the second antenna), then the first antenna is selected as being better.” See Col. 9, lines 16-32.

In contrast, the disclosed invention is a CDMA receiver. CDMA reception is entirely different from TDMA communication. This is because the CDMA reception apparatus carries out continuous reception while a TDMA reception apparatus carries out reception in burst or intermittently. Therefore, a CDMA reception apparatus cannot adopt the structure or antenna switching method from a TDMA reception apparatus. Specifically, the antenna switching technique of a TDMA system, such as disclosed in Morris, could not be adopted in a CDMA

reception apparatus because reception cannot be received at a time when the antennas are being switched.

Morris clearly teaches that the antennas are switched during the testing phase, i.e., to calculate the first RSSI value and the second RSSI value. Therefore, one of ordinary skill in the art would not combine the teachings of a TDMA receiver to arrive at the claimed invention.

Furthermore, Morris does not teach a “reception level control means”. The Examiner asserts that element 252 is the claimed reception level control means. Applicant submits that this feature is not suggested by the reference. Specifically, the reference teaches that “the diversity controller 110 controls when the ADC 252 samples the RSSI with RSSI sample control line 254”. At best, the ADC 252 captures the received electric field. However, the ADC 252 does not control the reception level or strength.

Additionally, Applicant submits that there is no motivation to combine Morris with Kenkel. It has been held by the courts that to establish *prima facie* obviousness, there must be some suggestion or motivation to modify the reference. See In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). The absence of such a suggestion to combine is dispositive in an obviousness determination. See Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997). “The showing of a motivation to combine must be clear and particular, and it must be supported by actual evidence.” Teleflex, Inc. v. Ficosa North American Corp., 299 F.3d 1313, 63 USPQ2d 1374 (Fed. Cir. 2002) (Citing In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)).

There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). The motivation

can come from the nature of the problem, the reference, or common knowledge. Id. The Federal Circuit stated:

[V]irtually all [inventions] are combinations of old elements. Therefore an Examiner may often find every element of a claimed invention in the prior art. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be “an illogical and inappropriate process by which to determine patentability.” To prevent the use of hind sight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. The Board [of Appeals] did not, however, explain what specific understanding or technological principle within the knowledge of one of ordinary skill in the art would have suggested the combination. ... To counter this potential weakness in the obviousness construct **the suggestion to combine [modify] requirements stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.**

In re Rouffet, 47 USPQ2d 1457-58 (Fed. Cir.1998) (citations omitted, emphasis added).

That the combination of references *would result* in a claimed invention is only part of the 35 U.S.C. § 103 analysis, the Examiner must also show a motivation or suggestion for modifying the references, this the Examiner has not done. Such conclusory statements are insufficient to show a motivation or suggestion to modify the references. Ecolchem, Inc. v. Southern California Edison Co., 227 F.3d 1361, 1372, 56 USPQ2d 1065, 1073 (Fed. Cir. 2000).

Additionally, the mere fact the reference can be combined or modified does not render the resultant combination obvious. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Although a prior art reference “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” Id. at 682.

Specifically, the Examiner avers that “it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Kenkel et al. for gradually increasing and decreasing the reception level of the antennas to the apparatus and method of Morris et al. in order to avoid sudden phase shift that can produce unacceptable audio output noise spike as suggested by Kenkel.” See Official Action, page 4. Applicant submits that this motivation is not present because Morris teaches a TDMA receiver which does not receive and process electric fields from both the first and second antennas simultaneously.

Kenkel teaches “signals received by one antenna can be seamlessly *combined* with signals from another antenna as to avoid sudden phase shifts that can produce unacceptable audio output spikes.” See Kenkel, Col. 2, lines 21-24 (Emphasis Added). As noted above, in the TDMA receiver of Morris, the first and second antennas do not “combine” electric fields from both the first and second antenna. Therefore, there is no need to include a “reception level control means, connected to said first and said second reception antennas, for gradually increasing one of reception levels in said first and said second reception antennas during a predetermined time interval and for gradually decreasing another of the reception levels during the predetermined time interval”. Accordingly, there is no motivation to combine.

Thus, Applicant submits that independent Claims 1 and 15 are patentably distinct from the cited references.

Furthermore, the Examiner rejected Claims 7 and 17 under 35 U.S.C. § 103(a) in view of the same references. Applicant respectfully disagrees with the rejection based upon the above-identified reasons. Additionally, Applicant submits that Claims 7 and 17 are further patentable based upon at least the following additional reasons.

The references fail to teach “the first accumulated amount of the strength of the received electric field in a *first half* within a first predetermined time interval and the second accumulated

amount of the strength of the received electric field in a ***latter half*** within a second predetermined time interval”, as specifically recited in Claims 7 and 17. Morris solely teaches that the first accumulated quality is calculated in the first six time slots and the second accumulated quality is calculated in a second six time slots. However, there is no suggestion for measuring the first value in the first half of the predetermined time period and the second value in the later half of the second predetermined time period.

In the disclosed embodiment of the invention, the CDMA apparatus includes a first and second reception antenna that receives an electric field and an antenna switching circuit. The antenna switching circuit attenuates an input electric field from the first reception antenna and an input electric field from the second reception antenna to produce an attenuated output signal. The attenuating amounts are independently controlled.

The reception apparatus sets the first and second attenuating amounts, which are different from each other, for the first and second input field in the first and second reception antennas within a predetermined time interval. For example, the first attenuating amount J1 for the first reception antenna is changed from 0db to 10db, and the second attenuating amount J2 is changed from 10db to 0db. The attenuating amounts are changed to allow for the calculation of the received field strengths for the first and second antennas.

The reception apparatus then determines whether the first input electric field in the first antenna is strong or the second input electric field from the second antenna is strong. The determining portion 74 compares a first accumulated value of the received electric field during the **first half** of the first through third time slots (S1 to S3) with a second accumulated value of the received electric field during the **latter** half of the fourth through sixth time slots (S4 to S6).

This determining portion determines a first total value of a first electric field integrated value and a second total value of a second electric field integrated value such that the

determining portion can determine whether the first input electric field from the reception antenna 21 is stronger or the second input electric field from the second reception antenna 22 is stronger.

Therefore, the hypothetically combined references fail to teach, suggest or render obvious each and every limitation of Claim 7 and 17. Accordingly, the claims are patentably distinct from the cited references.

The Examiner also rejected Claims 3-6 under 35 U.S.C. §103(a) as being unpatentable over Kenkel in view of Niki, U.S. Patent No. 4,620,147.

Claims 3-6 are directed to a first and second attenuating means that are composed of a T-type attenuator. The Examiner avers that Niki discloses an attenuating means composed of a T-type attenuator having the claimed constitution. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to adapt a T-type attenuator which would vary the control voltages supplied the first and second attenuating means as a system design choice serving the same function.

Applicant respectfully disagrees with the Examiner's rejection and traverses the rejection for at least the same reasoning as applied above.

Additionally, Applicant respectfully disagrees with the Examiner's assertion that using a T-type attenuator is solely a system design choice made based upon a desired function. While Niki does suggest that the T-type attenuator can be replaced by another circuit arrangement that can change the level of a signal such as a variable gain amplifier, the reference fails to provide any motivation to modify Kenkel to have the T-type attenuator as the first and second attenuating element. As set forth above, there must be a motivation to modify or combine a reference(s), such motivation is not provided by the Examiner.

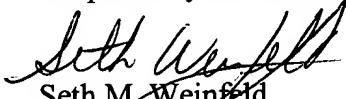
Accordingly, Claims 3-6 are patentably distinct from the cited references.

The remaining claims are patentable based upon their dependency from Claims 1 and 15.

For all the foregoing reasons, the Applicant respectfully requests the Examiner to withdraw the rejection of Claims 1-13, 15-23 pursuant to 35 U.S.C. § 103(a). Additionally, the Applicant requests the Examiner to withdraw the rejection of Claims 1-24 pursuant to 35 U.S.C. § 112, second paragraph.

In conclusion, the Applicant believes that the above-identified application is in condition for allowance and henceforth respectfully solicits the Examiner to allow the application. If the Examiner believes a telephone conference might expedite the allowance of this application, the Applicant respectfully requests that the Examiner call the undersigned, Applicant's attorney, at the following telephone number: (516) 742-4343.

Respectfully submitted,


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